A.2.6 SAMPLE RETURN LABORATORY INSTRUMENTS AND DATA ANALYSIS

1. Scope of Program

The ultimate goals of the Sample Return Laboratory Instrument and Data Analysis program (SRLIDAP) will be to maximize the scientific return from the samples provided by the Discovery missions, Genesis and STARDUST, through development of laboratory instrumentation and advanced analytical techniques required for the full analyses of the samples they returned.

Proposals solicited under this program are expected to include those that seek to develop new analytical instrumentation or combinations of analytical instruments or where significant improvements in the precision, resolution, or sensitivity of measurements will be made possible compared to the existing state-of-the-art. Also of interest is the development of new analytical techniques for existing instrumentation that will push the limits of current technology by elimination of analytical interferences or contamination problems. In some instances, it will make sense to develop instrumentation and techniques that will be used by only a small number of investigators at a single institution. In other instances, the high cost of the instrument and its associated support structure may allow the development of only a limited number of such facilities that must be shared by the entire community. Therefore, cost sharing arrangements in the development of new instrumentation or techniques and evidence of a long-term institutional commitment to the analysis of returned samples will be viewed favorably in the selection process.

2. Background

Genesis is a mission designed to return samples of the solar wind to provide tight constraints the chemical and isotopic composition of the primitive solar nebula; it is scheduled for launch in the summer of 2001 and will return of samples to Earth in 2004**.** STARDUST, a mission to return samples of a comet's coma, was successfully launched in 1999 and is scheduled to return its samples to Earth in 2006. It is anticipated that additional missions undertaken within the Discovery program will also return samples that pose unique analytical challenges.

3. Programmatic Information

Total funding for the SRLIDAP is about $7.5M in FY-2003 of which about $6.0M is available for the support of new research. It is anticipated that this level will support 25-35 new selections.

Status Reports: Holders of existing multiple year awards in this program that are entering their second or third year of a three-year award from a previous NRA for this program element must submit a Status Report. This Status Report should cover progress made toward completing the originally proposed research since the initiation of the award or last year's deadline for new proposals, whichever came last. This Status Report is due by the same deadline as for new proposals for this program element (see Table 1 or 2 in the Summary of Solicitation of this NRA). These Status Reports will be screened by the same peer review panel that will be convened to review new proposals as an aid to NASA's evaluation of existing awards. Such a *Status Report* should not exceed three single-spaced, typewritten pages with roughly two pages used for a description of the progress made during the previous year and the remainder to a statement of the work planned for the coming year (Note: this three page limit does not include references, figures, reprints, or appendices). The Status Report should be prefaced by a copy of the proposal's original *Cover Page* submitted through the web at the same site specified for new proposals in the summary of solicitation of this NRA (Note: the home page for this program element will provide the option to designate whether the *Cover Page* is for a new proposal or Status Report). and a copy of the original approved budget. Any request for an augmentation to the budget relative to the current approved funding must be supported by detailed information in conformance with Section 2.3.10 of the *OSS Guidebook-2001*. Submission of hard copy of the Status Report must include an original and four copies. Also note that it is expected that within a year a new electronic proposal data system that is now under development will begin to automatically notify holders of existing awards 75 days in advance of their award's anniversary date to submit the Annual Progress Report that is required to implement the next funding supplement of the award. The implications of possibly calling for two reports per year of existing awards in this Program Element will be resolved by then.

IMPORTANT INFORMATION

As discussed in the *Summary of Solicitation* of this NRA, the Office of Space Science (OSS) is now using a single, unified set of instructions for the submission of proposals. This material is contained in the document entitled *NASA Guidebook for Proposers Responding to NASA Research Announcement – 2001* (or *NASA Guidebook for Proposers* for short) that is accessible by opening URL http://research.hq.nasa.gov, and linking through the menu item "Helpful References," or may be directly accessed online at URL http://www.hq.nasa.gov/office/procurement/nraguidebook/. This NRA's Summary of Solicitation also contains the schedule and instructions for the electronic submission of a *Notice of Intent* (NOI) to propose and a proposal's *Cover Page/Proposal Summary*, which now also includes the required *Budget Summary*, and the mailing address for the submission of a proposal.

Questions about this Program Element may be directed to the Discipline Scientist:

Until April 1, 2002:

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After April 2, 2002, a new Discipline Scientist for this program will be announced as an amendment to this NRA.